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B.L.

1.1 Preparing for a Bicycle Tour

Big Idea: Observation and description of changes in the world around us  
are the first steps in finding and learning about patterns.

1.Notes: I could ride about 5 to 6 miles in a day. My speed could change during the course of the day by the different types of roads that I rode or will ride on. Some of the conditions that can affect the speed and distance I could ride are; traffic, temperature conditions, roads, trails, and bike conditions.

**2.Problem 1.1- Prepare a table for recording the total number of jumping jacks after every 10 seconds, up to a total time of 2 minutes (120 seconds) for the experiment.**

After the experiment, you should have a table done.

Table (Example)-

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Time(seconds) | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| Total number of jumping jacks | 0 | 16 | 34 | 46 | 58 | 70 | 80 | 92 | 102 | 116 | 126 | 137 | 148 |

**Problem 1.1 Follow-Up-**

1. **How did your jack rate (the number of jumping jacks per second) change as time passed? How is this shown in your table?**

A: As time passes, my jumping jack rate decreased little by little. This information is shown by the changing of the differences on my table (total number of jumping jacks).

1. **What might this pattern suggest about how bike-riding speed would change over a day’s time on the bicycle tour?**

A: The speed should change from starting slow to save your energy, then get faster after time. You should try to keep your pace while you are on the bicycle tour and do not try to overuse your energy.